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A NEW HISPANIOLAN GECKO

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Recent collecting in Haiti yielded a single specimen of an undescribed species of *Sphaerodactylus* from the western part of the Massif de la Hotte on the Tiburon Peninsula. I wish to express my appreciation to Dr. Albert Schwartz, who sponsored my collecting in Haiti (February to April of 1966), which resulted in the discovery of this new species. The abbreviation MCZ denotes the Museum of Comparative Zoology, and ASFS denotes the Albert Schwartz Field Series.

In reference to its most salient distinguishing character, this new gecko may be known as

SPHAERODACTYLUS ELASMORHYNCHUS¹ new species

Holotype: MCZ 81119, a female, taken ca. 5 km (airline) SSE Marché Léon, Dépt. du Sud, Haiti, at an elevation of 2600 feet (790 meters), on 15 March 1966 by Richard Thomas. Original number ASFS V9353.

Diagnosis: A species of *Sphaerodactylus* distinguished by: 1) much enlarged supranasals and postnasals² which abut against the rostral and labials to form a continuous, platelike covering over most of the snout; 2) a finely granular dorsal scalation; 3) large, smooth, imbricate ventral scales; and 4) a dorsal coloration of small orange ocelli on a dark brown ground color. The first character distinguished *elasmorhynchus* from all other known species of *Sphaerodactylus*.

Description of holotype (Fig. 1): Snout-vent length 17 mm; tail (unregenerated) 17 mm. Rostral with a median crease; postnasals enlarged, roughly trapezoidal with bases towards anterior

¹ From the Greek, *clamos*, plate, and *rhynchos*, snout.

² Although I could not see a definite nasal scale, even under high magnification, I have called the large scale behind the naris the postnasal because of its position (see Smith, 1946, fig. 27).

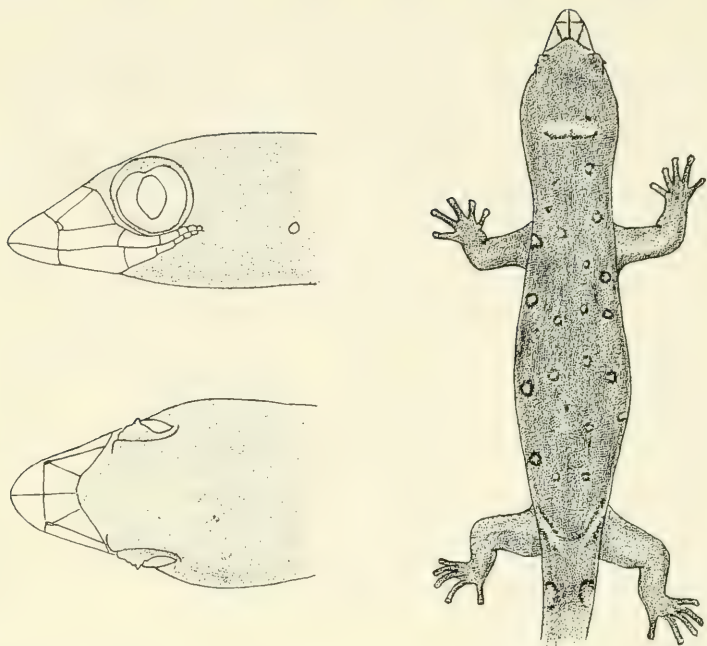


Fig. 1. Holotype of *Sphaerodactylus elasmorhynchus*: lateral and dorsal views of head and full dorsal view.

edges of orbits and ventral long sides sutured with upper edges of first supralabials; two large, platelike, roughly trapezoidal supranasals with their bases abutting against posterior edge of rostral and their lateral edges against dorsal edges of postnasals. Upper labials to mid-eye, two. Rostral, supranasals, postnasals and labials form platelike covering to snout. Scales of snout behind platelike covering swollen, subimbricate to imbricate, and keeled. Scales of top of head and on body granular, subimbricate, keeled, more swollen and more erect on flanks than mid-dorsally; dorsal scales, axilla to groin, 56 (an injury on the venter prevents the taking of midbody and longitudinal ventral counts); 1-2 large hair-bearing (3 hairs, at most) scale organs on the tip of each scale. Scales on anterodorsal parts of limbs flattened and imbricate. Gular scales granular; ventral scales large, rounded, flattened, smooth and imbricate; transition between the two on posterior part of neck abrupt. Dorsal scales of tail flattened, flat-lying, acute, keeled and imbricate; ventral scales of

tail flattened, flat-lying, rounded and smooth, midventral row enlarged. Fourth toe lamellae 10.

Coloration: In life the type was dark brown with dark-edged, orange-centered ocelli on body and tail. The ocelli are arranged in six irregular longitudinal rows on the body; those of the dorsolateral rows are largest and most prominent; those of the paramedian and ventrolateral rows are smaller and less distinct. The occiput bears a pair of transversely elongate light markings, and a faint pair of forked, dark, postocular stripes was noted in life. The sacrum has a pair of enlarged, diagonal light markings whose dark medial margins unite to form a U-shaped sacral figure. Two dorsal rows of ocelli occur on the tail. The throat is lightly pigmented and has faint lighter longitudinal streaks; the venter is very heavily pigmented but has light central areas to many of the scales.

Comparisons: The enlarged platelike scales of the snout distinguish this species from all other known *Sphaerodactylus*. Also distinctive are the size difference between the dorsal and ventral scales and the relatively abrupt transition from gular granules to ventral scales. Head length (ear to tip of snout) has been plotted against snout-vent length for five species of *Sphaerodactylus* in addition to the type of *elasmorhynchus* (Fig. 2). The value plotted for the type of *elasmorhynchus* falls with the values for adult specimens of small species (*S. n. nicholsi* Grant and *S. parthenopion* Thomas), rather than with the values plotted for juvenile specimens of larger species (*S. cinereus* Wagler, *S. roosevelti* Grant, *S. difficilis* Barbour). Thus it appears that the type of *elasmorhynchus* is an adult or subadult, not a juvenile, and represents a small-sized species.

The distinctness of *S. elasmorhynchus* prevents an assessment of its relationships at this time; it is not obviously a member of any of the recognized groups of the genus. Although *elasmorhynchus* has granular dorsal scales, it differs strongly from all members of the predominantly granular scaled *decoratus* group in the characters mentioned above, and apparently in size also (for a review of the *decoratus* group, see Thomas and Schwartz, 1966). Of the known species of Hispaniolan sphaerodactyls, *S. cinereus* is the only other one having granular dorsal scales, but it too has no evident affinities with *elasmorhynchus*. The large hair-bearing scale organs of *elasmorhynchus* are characteristic of other granular scaled *Sphaerodactylus*; the small number per scale is probably a reflection of the small size of the species.

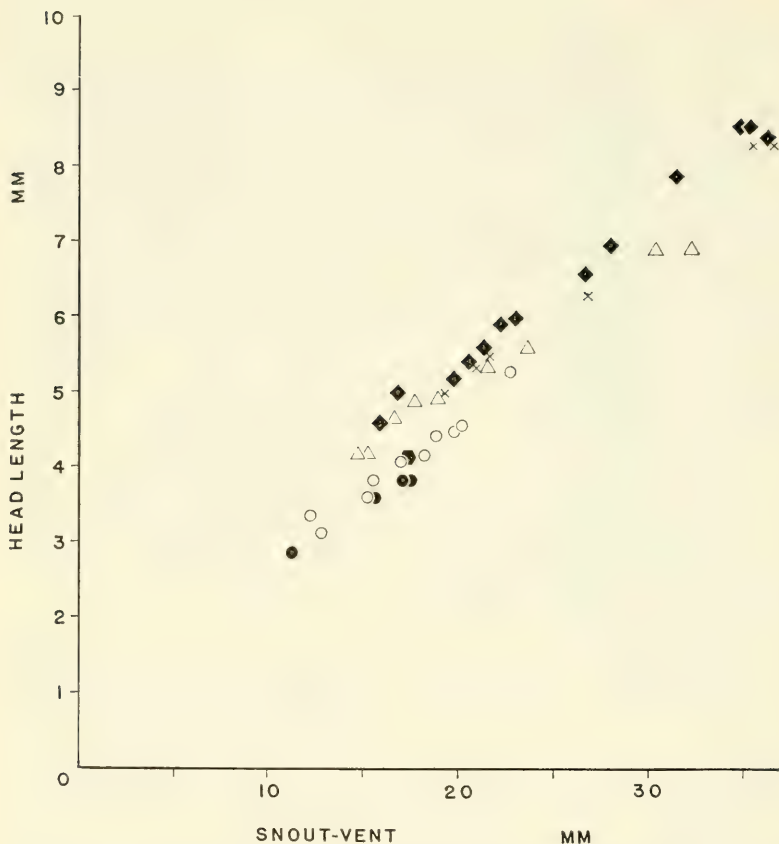


Fig. 2. Scatter diagram of head length (anterior border of ear to tip of snout) versus snout-vent length for six species of *Sphaerodactylus*: solid rhombs, *S. cinereus*; hollow triangles, *S. difficilis*; crosses, *S. roosevelti*; hollow circles, *S. n. nicholsi*; solid circles, *S. parthenopion*; solid hexagon, type of *S. elasmorhynchus*. For each species, aside from *elasmorhynchus*, the range of values plotted includes near-hatchling juveniles through mature adults.

Grant (1957) has shown that the enigmatic *S. nigropunctatus* Gray, known from a single type of unknown provenance, is a granular scaled form. However, references to the snout scalation of *nigropunctatus* in Grant (1957), and a drawing of its snout (Boulenger, 1885, pl. 18), indicate that it has the normal *Sphaerodactylus* snout scale configuration; the type is also large in size.

Remarks: The type of *S. elasmorhynchus* was found among the roots of a standing but rotten tree on the side of a ravine filled with a jumble of limestone rocks and boulders. Although the surrounding countryside was much cut over, the ravine was overgrown with mesic vegetation. Also taken at this locality were specimens of the relatively little known *Anolis monticola* Shreve. No other sphaerodactyls were found at this locality. Of the named Hispaniolan species, *S. copei* Steindachner and *S. cinereus* are the only ones occurring in this general region of Haiti.

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